*STATE FOREST LAND*
**ENVIRONMENTAL CHECKLIST**

**Purpose of Checklist:**

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

**Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

**Use of checklist for nonproject proposals:**

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

**A. BACKGROUND**

1. Name of proposed project, if applicable:

   *Timber Sale Name:LILIENTHAL FI SORTS* *Agreement #:30-079656*

2. Name of applicant: Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:
   Bob McKellar
   P.O. Box 190
   Colville WA. 99114
   (509)684-7474

4. Date checklist prepared: 06/26/2006

5. Agency requesting checklist: Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

   a. *Auction Date:12/12/2006*
   b. *Planned contract end date (but may be extended): 12/12/2008*
   c. *Phasing: yes additional activities listed below.*

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   *Timber Sale*

   a. *Site preparation:*

   Normal tractor yarding disturbance and burn landing piles. Other site preparation methods such as broadcast burning or mechanical piling may be used if future assessments show it is necessary.

   b. *Regeneration Method:*

   Regeneration Method: Natural regeneration is anticipated on 80% to 90% of the sale area, because adequate site preparation is expected from normal skidding operations. Openings caused by logging, disease or insect damage may be planted with 200 trees per acre of ponderosa pine and western larch.

c. *Vegetation Management:*

Landings and roads may be grass seeded to reduce erosion potential and lower the chance of noxious weed invasion. Spraying for noxious weeds may also occur.

d. *Thinning:*

Pre-commercial thinning is planned for Units 1, 2, 3, 4, 5, 6, 9 and 10 due to overstocked conditions. Spacing of 12' to 18' is necessary to achieve maximum growth of the currently overstocked stands. Approximate acreage of thinnings is 300 acres.

*Roads:* Road maintenance assessments will be conducted annually and may include periodic ditch and culvert clean out, and grading to minimize erosion. See draft road plan dated 8/7/2006 and RMAP No. R2302473.

*Rock Pits and/or Sale:* None known

*Other:* None known.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐ *303 (d) – listed water body in WAU:* ☐ *temp* ☐ *sediment* ☐ *completed TMDL (total maximum daily load):*
☐ *Landscape plan:*
☐ *Watershed analysis:*
☐ *Interdisciplinary team (ID Team) report:*
☒ *Road design plan: DNR Draft Road Plan dated 8/7/2006*
☐ *Wildlife report:*
☐ *Geotechnical report:*
☐ *Other specialist report(s):*
☐ *Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☐ *Rock pit plan:*
☒ *Other:* GIS generated WAU maps reporting soil types, mass wasting potential, erosion potential, soil stability, and habitat typing; DNR TRAX; Policy for Sustainable Forests; DNR Smoke Management Plan; State Soil Survey; DNR Road Maintenance and Abandonment Plan No. R2302473(Miles Road Management Block).

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None are known to be pending.

10. List any government approvals or permits that will be needed for your proposal, if known.

☒ *HPA* ☒ *Burning permit* ☐ *Shoreline permit* ☐ *Incidental take permit* ☒ *FPA #* 03013076 ☐ *Other:*

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. *Complete proposal description:*

There are thirteen proposed harvest units in the Lilienthal Forest Improvement Project, encompassing approximately 948 net acres. The project is located in Sections 9 and 16, Township 27 North, Range 37 East and Sections 14 and 24, Township 28 North, Range 36 East W.M. Units 1 through 5 are located approximately 13 miles north of Davenport, WA and Units 6 through 13 are located approximately 20 miles north of Davenport, WA. All stands in this project are part of the Forest Improvement and fuel reduction project. All stands in this project are overstocked with forest health declining. Approximate removal volume is 3,000 mbf.

Unit 1 – 47 net and gross acres, even-aged
Unit 2 – 102 net and gross acres, uneven-aged
Unit 3 – 32 net and gross acres, uneven-aged
Unit 4 – 52 net and gross acres, uneven-aged
Unit 5 – 89 net and gross acres, uneven-aged
Unit 6 – 48 net and gross acres, even-aged
Unit 7 – 149 net and gross acres, uneven-aged
Unit 8 – 36 net and gross acres, uneven-aged
Unit 9 – 83 net and gross acres, uneven-aged
Unit 10 – 41 net and gross acres, uneven-aged
Unit 11– 130 net and gross acres, uneven-aged
Unit 12– 83 net and gross acres, even-aged
Unit 13– 56 net and gross acres, even-aged

Total: 948 net and gross acres

Nine of the units are uneven-aged harvests and four are even-aged harvests. Ponderosa pine and Douglas fir are the dominant overstory species in the majority of the units with a small amount of scattered western larch in Unit 7. The understory is stocked to overstocked in all stands with the species being in order of majority: ponderosa pine, Douglas fir, and western larch. The majority of the units are experiencing dwarf mistletoe and bark beetle activity in the ponderosa pine and Douglas fir. Perferred leave species is ponderosa pine and then Douglas fir, any western larch should be retained. Leave trees will exhibit a healthy crown, vigorous growth, and free of disease and insects.

b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.*

All units are dominated with ponderosa pine, along with a mix of Douglas fir and a few western larch. The stands vary in age from 35 years to 100 years, with the occasional ponderosa pine reaching 110+ years of age. All units are overstocked with forest health declining rapidly. There is dwarf mistletoe activity in all units, pine beetle activity also is present in all units more so in units 5, 7, 12 and 13. All units are ground based, Units 2, 3, 4, 5 7, 8, 9, 10 and 11 are uneven-aged harvests, Units 1, 6, 12 and 13 are even-aged

harvests. The over all objective is to improve forest health, reduce fuels to prevent catastrophic wildfire and ensure future revenue for the trust.

c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*

| Type of Activity | How Many | Length (feet) (Estimated) | Acres (Estimated) | Fish Barrier Removals (#) |
|---|---|---|---|---|
| Construction | [redacted] | 3,765' | 1.3 | NA |
| Reconstruction | [redacted] | 600' | [redacted] | NA |
| Abandonment | [redacted] | 1,124' | .4 | NA |
| Bridge Install/Replace | NA | [redacted] | [redacted] | NA |
| Culvert Install/Replace (fish) | NA | [redacted] | [redacted] | NA |
| Culvert Install/Replace (no fish) | 9 | [redacted] | [redacted] | [redacted] |

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *(See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. Legal description:

T27N R37E S16
T27N R37E S9
T28N R36E S14
T28N R36E S24

b. *Distance and direction from nearest town (include road names):*

Units 1 through 5 are located approximately thirteen miles north of Davenport, WA. Access is off the Porcupine Bay County Road onto a private gated road. Units 6 through 13 are located approximately twenty miles north of Davenport, WA. Access is off the Egypt Loop County Road onto a private gated road.

c. *Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")*

| WAU Name | WAU Acres | Proposal Acres |
|---|---|---|
| ORAZADA CREEK | 34455.2 | 626 |
| BLUE CREEK | 29791.7 | 322 |

13. *Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)*

The following is a summary of observations utilizing Forest Practice information, ortho-photos, DNR's WAU map, and local knowledge.

Specific future activities are unknown at this time. All DNR lands within these WAU's will be monitored for forest health and public resource protection issues.

It is not known if harvests on private lands were conducted on every Forest Practice application submitted, but it appears that most proposals were harvested. Future harvests on private land are unknown, but it is expected that private land management activities will occur.

**Blue Creek WAU**

Department of Natural Resources has 753 acres (3%), Federal 1,980 acres (7%), Tribal 17,689 acres (59%) and Private ownership comprises 9,370 acres (31%) of the WAU with these varying from small lots and 200 + acre multi-family residential holdings, to commercial timber production lands. Within the past seven years, Forest Practice applications have been submitted on 3% of non-DNR and 14% of DNR lands. Of the Forest Practice applications submitted, 65% (516 acres) of non-DNR and 54% (59 acres) of DNR have been uneven-aged harvests. Even-aged harvests have been 100% (280 acres) of non-DNR holdings and 0% (0 acres) of DNR property. Salvage harvests have been 5% (3 acres) of non-DNR holdings and 95% (50 acres) of DNR property. The 322 acres of this proposal associated with this WAU are all uneven-age harvests and will be 26% of all harvests within the past 7 years.

**Orazada Creek WAU**

Department of Natural Resources has 1,402 acres (4%), Federal 4,818 acres (14%), Tribal 16,515 acres (48%) and Private ownership comprises 11,720 acres (34%) of the WAU, with private ownership varying from small lots and 200 + acre multi-family residential holdings, to commercial timber production lands. Within the past seven years, Forest Practice applications have been submitted on 3% of non-DNR and 22% of DNR lands. Of the Forest Practice applications submitted, 79% (1,119 acres) of non-DNR and 17% (240 acres) of DNR have been uneven-aged harvests. Even-aged harvests have been 0% (0 acres) of non-DNR holdings and 4% (62 acres) of DNR property. The 626 acres of this proposal associated with this WAU are all uneven-age harvests and will be 31% of all harvests within the past 7 years.

## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

a. General description of the site (check one):

☐Flat, ☐Rolling, ☐Hilly, ☐Steep Slopes, ☒Mountainous, ☐Other:

*1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).*

The Blue Creek WAU totals 29,792 acres. The WAU extends from the intersection of US Highway 25 and Porcupine Bay County Road northeast crossing the Spokane River towards Bear Mountain on the Spokane Indian Reservation. Bear Mountain reaches a maximum elevation of 3,449 feet. The boundary turns southwest crossing the Spokane River at Porcupine Bay to the intersection of US Highway 25 and Egypt Loop County Road and then south on US Highway 25 to Porcupine Bay County Road. Streams at higher elevations are confined by terrain. At mid and lower elevations they have winding channels, having the potential to overflow stream banks and do some minor flooding of fields. The WAU consists of a fair amount of agricultural land. Majority of the WAU consists of the Spokane Indian Reservation land. At lower elevations and on south slopes it will be open grasslands mixed with ponderosa pine. As elevation increases or on north aspects Douglas fir and western larch are present. Generally, the higher elevations are managed by the Spokane Indian Reservation. Summer temperatures range from 75 to 100 degrees with winter temperatures ranging from 20 to 40 degrees. Typical snow coverage is 1 to 2 feet at lower elevations and 3 to 6 feet at higher elevations. The annual precipitation is approximately 12 inches per year. Vegetation zones are ponderosa pine and Douglas fir.

The Orazada Creek WAU totals 34,455 acres. The WAU extends from the mouth of the Spokane River north along US Highway 25 to Enterprise Valley in the Spokane Indian Reservation. The boundary turns east till the Orazada Mine Road and then turns south following that road. It then crosses the Spokane River at Porcupine Bay to the intersection of US Highway 25 and Egypt Loop County Road and then follows US Highway 25 to the west of it going north up the mouth of the Spokane River. Streams at higher elevations are confined by terrain. At mid and lower elevations they have winding channels, having the potential to overflow stream banks and do some minor flooding of fields. The WAU consists of a fair amount of agricultural land. Majority of the WAU consists of the Spokane Indian Reservation land. At lower elevations and on south slopes it will be open grasslands mixed with ponderosa pine. As elevation increases or on north aspects Douglas fir and western larch are present. Generally, the higher elevations are managed by the Spokane Indian Reservation. Summer temperatures range from 75 to 100 degrees with winter temperatures ranging from 20 to 40 degrees. Typical snow coverage is 1 to 2 feet at lower elevations and 3 to 6 feet at higher elevations. The annual precipitation is approximately 12 inches per year. Vegetation zones are ponderosa pine and Douglas fir.

*2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).*

This proposal is mainly in the dry Douglas fir habitat type, with ponderosa pine and Douglas fir being the dominat species. All the units are located in the south portion of the Blue Creek WAU and the south central portion of the Orazada WAU. This area is mainly hilly forest land with some open slopes. Elevation of this proposal is 1,600 to 3,000 ft. The main difference with the proposal location is that the majority of it is in timber production and the rest of the WAU's are part timber production, agricultural land and grazing.

b. What is the steepest slope on the site (approximate percent slope)?

Approximately 40% slope.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

| State Soil Survey # | Soil Texture or Soil Complex Name | % Slope | Acres | Mass Wasting Potential | Erosion Potential |
|---|---|---|---|---|---|
| 2016 | LOAMY SAND | 15-25 | 80 | INSIGNIFICT | LOW |
| 7480 | STONY LOAM | 0-40 | 600 | INSIGNIFICT | MEDIUM |
| 7481 | STONY LOAM | 30-70 | 100 | MEDIUM | HIGH |
| 7484 | ROCK COMPLEX | 0-30 | 168 | LOW | MEDIUM |

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

*1) Surface indications: None known.*

*2) Is there evidence of natural slope failures in the sub-basin(s)?*
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

*3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
*Associated management activity:*

*4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*
☒*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*

*5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*

Roads will include rolling dips and water bars as needed to control erosion by diverting runoff to the forest floor. In addition, roads and skid trails will be grass seeded and water barred as needed.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
*Approx. acreage new roads: 1.3 Approx. acreage new landings: 2.0 Fill source: None*

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes, erosion could occur as a result of use of the roads. Roads are designed according to road specifications in the road plan. All existing roads were located on as gentle ground as possible. Coordinated timber harvest, skidding patterns, appropriate landing locations, effective contract administration and road maintenance can minimize the erosion potential. Water bars and/or driveable dips, ditching and cross drains, outsloping, monitoring, and revegetating will be utilized. All proposed measures will provide protection and will meet and/or exceed Forest Practice regulations.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*

Approximately 1% of the site will be native material surface roads. No permanent impervious surfaces will be used in this proposal.

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
*(Include protection measures for minimizing compaction or rutting.)*

Seasonal restrictions will be placed on felling, skidding and hauling activities during spring breakup (Feb. 1st through May 15th) and during excessively wet conditions. Roads have been designed with drivable dips and out/in sloped roads to minimize erosion potential. On crowned or in sloped roads, ditch lines and cross drains will be installed. Cross drainages will conduct water out onto natural vegetation on the forest floor. Roads constructed on slopes greater than 45% will be full-bench construction.

**2. Air**

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling*, automobile, odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

This proposal will involve vehicle emissions and dust from logging, skidding, road construction (if necessary), rock pit construction (if necessary) and hauling. If pile or broad cast burning occurs, it will adhere to the State's Smoke Management Program.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust abatement will be performed as necessary on forest roads to ensure protection of improvements and to limit damage to the running surface.

**3. Water**

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map and forest practice base maps.)*

*a) Downstream water bodies:*

The Spokane River is approximately half mile downstream, which flows into Lake Roosevelt.

*b) Complete the following riparian & wetland management zone table:*

| Wetland, Stream, Lake, Pond, or Saltwater Name (if any) | Water Type | Number (how many?) | Avg RMZ/WMZ Width in Feet (per side for streams) |
|---|---|---|---|
| Un-named | Np | 2 | 50' |
| Un-named | Ns | 5 | 30' |
| | | | |
| | | | |
| | | | |

*c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.*

There are two Type Np streams bounded out of the proposal. The Units that they are bounded out on are: the north end of Unit 4 and the middle of Unit 7. These type Np streams are bounded by ribbon and tags at a minimum of 50'. There are five type Ns streams that flows on the east and west end of Unit 8, the west end of Unit 10, and the west end of Unit 11 on the west side of Unit 12 and the south side of Unit 13 These type Ns streams are bounded by ribbon and tags at a minimum of 30 foot and are excluded from any equipment.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐ *No* ☒ *Yes (See RMZ/WMZ table above and timber sale map.)*
*Description (include culverts):*

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Fill and dredge material will be the absolute minimum needed for the installation and removal of culverts. Clean adjacent fill material will be used.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☐*No* ☒*Yes, description:*

Some diversion may be necessary for culvert removal. Any diversion will be in accordance with the hydraulic permit.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒*No* ☐*Yes, describe location:*

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒*No* ☐*Yes, type and volume:*

*7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*

All soils in this project have a medium to insignificant potential for mass wasting. The majority of the site has a medium surface erosion potential, 100 of the 948 acres have a high erosion potential. Techniques mentioned in B. 1.h., are anticipated to minimize the potential for surface erosion and/or mass wasting to enter surface water.

*8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), and change in channel dimensions)?*
☒*No* ☐*Yes, describe changes and possible causes:*

*9) Could this proposal affect water quality based on the answers to the questions 1-8 above?*
☒*No* ☐*Yes, explain:*

There is no or little impact to stream flow or water quality expected as a result of this proposal. Sale unit design, skidding patterns, operation seasons, and prescriptions minimize any potential for adverse impacts. Hauling may be limited from Feb. 15th to May 15th or during extreme wet conditions, unless approved by the contract administrator.

*10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?*
*Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?*
☒*No* ☐*Yes, describe:*

| | |
|---|---|
| Blue Creek WAU: | 4.3 miles/square mile (DNR)<br>3.4 miles/square mile (non-DNR)<br>3.5 miles/square mile TOTAL |
| Orazada Creek WAU: | 6.8 miles/square mile (DNR)<br>3.0 miles/square mile (non-DNR)<br>3.2 miles/square mile TOTAL |

*11) Is the proposal within a significant rain-on-snow (ROS) zone? If not,* ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*
☒*No* ☐*Yes, approximate percent of WAU in significant ROS zone.*
*Approximate percent of sub-basin(s):*

30% of the Blue Creek WAU and 25% of the Orazada Creek WAU is in the rain-on-snow zone.

*12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?*

The Blue Creek WAU has approximately 30% of its acreage rated as hydrologically mature in the rain- on-snow zone and the Orazada Creek WAU has 25%.

*13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?*
☐*No* ☒*Yes, describe observations:*

There are some indications of past high water events within the WAU, which appear to have occurred as natural events, mainly as spring runoff from snowmelt. The primary evidence is the scouring and deposition of materials observed in the stream channels after runoff waters have receded. This is a natural process that occurs each spring on streams throughout the WAU. There is also evidence of livestock use in some areas, which has some isolated effects.

*14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*

Based on aerial photos, site visits, and GIS data this proposal was determined to be well below the threshold for potential impacts to peak flow. At the completion of this proposal, it is expected to remain well below the threshold.

To assure this proposal will not contribute to an increased chance of negative environmental impact, several protection measures have been included in the proposal. Coordinated skidding patterns and landing locations, effective contract administration and normal road maintenance is expected to minimize erosion potential within

and adjacent to the proposal area. Water bars and/or drivable dips, ditching and cross drains, out sloping, monitoring, and revegetation of cut slopes and skid trails will be used as needed to minimize the potential for soil erosion, mass wasting events, and contributing to peak flows within the WAU. The contract administrator will monitor activities to determine if and when hauling, yarding, and or felling may be suspended if wet weather conditions threaten public resources within the sale area or along the haul routes. Hauling on all roads will be suspended during spring breakup or during wet conditions that would cause significant rutting of road surfaces. Additional measures will be incorporated when necessary as determined by the contract administrator. Proper road maintenance and cross drainage on the haul route will ensure that water accumulating on the running surfaces will be dispersed onto the undisturbed forest floor. The actual change to the amount of forest vegetative cover is expected to be minimal considering the overall size and ownership of the WAU. In addition, see B.h.1 for protection measures regarding roads and harvest activities. See A.13 for ownership and harvest type and frequency within the WAU.

*15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*
☒*No* ☐*Yes, possible impacts:*

*16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*

Included in this proposal is the exclusion of all RMZs from harvest areas and the improvement of water passages and drainages associated with streams, see B.1.h.

b. Ground *Water*:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Ground water should not be significantly changed by this project. Ground water recharge directly below cross drains may increase.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground from septic tanks or other sources due to this project.

*3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*
☒*No* ☐*Yes, describe:*

*a) Note protection measures, if any.*

Harvest boundaries are located at least 50 feet from Type Np waters and 30 foot riparian management zone from Type Ns waters. Proper road maintenance, along with ditches and cross drains will ensure that water accumulating on running surfaces will be drained and then dispersed onto the undisturbed forest floor.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Snow melt and rain are the main source of water run off. Runoff that is intercepted by road surfaces and ditches will be diverted onto the undisturbed forest floor where possible. Culverts have been located to minimize the amount of runoff directly entering stream channels.

2) Could waste materials enter ground or surface waters? If so, generally describe.

None are anticipated with the protective measures proposed, see B.3.b.3.

*a) Note protection measures, if any.*

Equipment limitations along non-fish seasonal streams and directional felling away from streams is required. No mechanical lubricants will be disposed of onsite.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

See surface water, ground water, and water runoff sections above, questions B.3.a.1.c, B.3.a.16., B.3.b3.a., and B.3.c.2.a.

**4. Plants**

a. Check or circle types of vegetation found on the site:

☒deciduous tree: ☐alder, ☐maple, ☐aspen, ☐*cottonwood,* ☒*western larch,* ☐*birch,* ☐other:
☒evergreen tree: ☒*Douglas fir,* ☐*grand fir,* ☐*Pacific silver fir,* ☒*ponderosa pine,* ☐*lodgepole pine,* ☐*western hemlock,* ☐*mountain hemlock,* ☐*Englemann spruce,* ☐*Sitka spruce,* ☐*red cedar,* ☐*yellow cedar,* ☐other:
☒shrubs: ☐*huckleberry,* ☐*salmonberry,* ☐*salal,* ☒*other:ocean spray*
☒grass
☐pasture
☐crop or grain

☐wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☐*devil's club,* ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

*1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")*

Units 9, 12 and 13 have Park Service timberland to the north, and private timberland ownership is adjacent to Units 1,2, 4, 5, 6, 7, 8, 10 and 11. The Park Service timberland has a similar stand to the one being treated. There is a mixture of ponderosa pine, Douglas fir and a few scattered western larch. This property runs along the Spokane River. Dwarf mistletoe and bark beetles have also impacted the adjacent Park Service timberland. The other units mentioned have adjacent private timberland. These properties have recently been harvested in the last five years. The residual stand is a mixture of ponderosa pine and Douglas fir approximate ages from 60 to 90 years. Grazing is also found among the open pine timberland to the south of Unit 6.

*2) Retention tree plan:*

Leave tree preferences will be based upon species, health, size, vigor, location, and dominance. See prescription details in A.11.b.
DNR Legacy Tree Policy was followed with unit harvest prescription. Leave tree requirements will meet or exceed Legacy Tree Policy. The largest and oldest leave trees were selected to leave in compliance with Engrossed Substitute Senate Bill 6384 (Supplemental Budget Bill).

c. List threatened or endangered *plant* species known to be on or near the site.

| TSU Number | FMU_ID | Common Name | Federal Listing Status | WA State Listing Status |
|---|---|---|---|---|
| None Found in Database Search | | | | |

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None needed.

**5. Animal**

a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☒eagle, ☒songbirds, ☐*pigeon,* ☐other:
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☐other:
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
*unique habitats:* ☒*talus slopes,* ☐*caves,* ☐*cliffs,* ☐*oak woodlands,* ☐*balds,* ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

| TSU Number | FMU_ID | Common Name | Federal Listing Status | WA State Listing Status |
|---|---|---|---|---|
| None Found in Database Search | | | | |

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*

All of Washington state is part of the Pacific flyway. No impacts are anticipated from this proposal.

d. Proposed measures to preserve or enhance wildlife, if any:

Retention trees (which include legacy trees), wildlife reserve trees, green recruitment trees, and snags, will be left scattered randomly throughout the sale units. These, in addition to down logs and woody debris, will be left to provide habitat for various species. No snags shall be felled during harvesting operations unless for Labor and Industry requirements or operational safety concerns. A portion of the disturbed areas (skid trails, landings, and some roads) will be grass seeded following the completion of harvesting activities. This should minimize the chance for erosion and noxious weed invasion. In addition, the proposed harvest will create a mosaic pattern due to unit design, which may create edge effect and benefit some wildlife species.

**6. Energy and Natural Resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

No energy source needed.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

This project will not affect the potential use of solar power by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

No energy conservation features are included in the plans of this proposal.

**7. Environmental Health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe special emergency services that might be required.

Washington Department of Ecology will be notified if any significant hazardous material spills occur and appropriate action will be taken. Department of Natural Resources and local fire districts will respond for fire suppression. Emergency medical or air ambulance for personal injuries.

2) Proposed measures to reduce or control environmental health hazards, if any:

Compliance with existing state laws regarding environmental health hazards. Fire equipment will be required on site during fire season.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Does not apply.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

During the road construction, maintenance and harvest activities there will be some noise associated with heavy equipment, chain saws and log truck operations.

3) Proposed measures to reduce or control noise impacts, if any:

No measures proposed.

**8. Land and Shoreline Use**

a. What is the current use of the site and adjacent properties? *(Site includes the complete proposal, e.g. rock pits and access roads.)*

The state land is currently used for timber production and recreational activities such as hunting and hiking.
The adjacent properties are mainly residential, grazing and crop lands, with some timber production.

b. Has the site been used for agriculture? If so, describe.

The project area has not been used for agriculture.

c. Describe any structures on the site.

There are no structures on site.

d. Will any structures be demolished? If so, what?

No structures will be demolished.

e. What is the current zoning classification of the site?

Rural.

f. What is the current comprehensive plan designation of the site?

Not applicable to this proposal.

g. If applicable, what is the current shoreline master program designation of the site?

None apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

No one will reside or work at the completed project.

j. Approximately how many people would the completed project displace?

No one will be displaced with the completed project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No measures are needed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None needed, this area is considered rural under the Lincoln County Basic Policy Plan.

**9. Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Doesn't apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Doesn't apply.

c. Proposed measures to reduce or control housing impacts, if any:

Doesn't apply.

**10. Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

Does not apply, no structures in this proposal.

b. What views in the immediate vicinity would be altered or obstructed?

1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☐*No* ☒*Yes, viewing location:*

The proposal is visible from Two Rivers Casino and Fort Spokane.

2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☐*No* ☒*Yes, scenic corridor name:*

Highway 25, Egypt Loop Road, Porcupine Bay Road, Teel Heel Road.

3) *How will this proposal affect any views described in 1) or 2) above?*

The stand will be more open and some skid trails may be visible.

c. Proposed measures to reduce or control aesthetic impacts, if any:

In 8 out of 13 units, more than 20 trees per acre 12" and larger will be left to help maintain aesthetics.

**11. Light and Glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

There may be light or glare from logging equipment during daylight hours.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

The finished project will not produce light or glare.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

There are no measures to reduce or control light anticipated.

**12. Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?

Hiking, biking and camping.

b. Would the proposed project displace any existing recreational uses? If so, describe:

Recreation uses will be displaced during harvest period, uses may resume after harvest is complete.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Recreational uses will be displaced during the harvest period for safety reasons, this is short term proposal, causing short term displacement.

**13. Historic and Cultural Preservation**

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None listed. None were found within the DNR TRAX system to be within the unit boundaries.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known.

c. Proposed measures to reduce or control impacts, if any:
*(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)*

DNR TRAX systems lists no archaeological/historical site in this proposal.
If an unknown historic or cultural resource is discovered during the operation, the following process will occur:
1) Cease operations affecting the discovered site.
2) Physically identify the site on the ground so it can be located and impacts mitigated (a buffer if necessary).
3) Contact the region state lands assistant and the district manager and work in collaboration on timing, confidentiality, and notification of tribes and other affected parties.

**14. Transportation**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Highway 25, Porcupine Bay Road, Teel Heel Road, Egypt Loop Road.

*1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*

While timber harvest activities are active there is the potential for an increase in noise and dust in the general vicinity of the timber sale. Roads used for harvest activities and access to the sale area will be maintained during the course of active operations. Warning signs will be posted on roads to inform the public of the harvest operation.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No public transit system known to be in the area. The nearest system would 13 miles away at Davenport, WA.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Does not apply.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

See A.11.c., all road reconstruction will occur on state lands. The road plan map shows the locations and approximate lengths of proposed road maintenance and reconstruction work. This proposal does require 3,766 feet of new road (See page 2). Improvements may include adding rock, ditching, and grading.

*1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*

This proposal should have no significant impact on the current transportation system. Any impact will be temporary, and limited to the period of time during which operations are being conducted. Access to existing roads in the sale area may be restricted during operations.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No, none of these modes of transportation are available in the vicinity of the proposal.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The completed project will not generate any additional vehicle traffic. While timber harvest is occurring, work may generate 5 to 10 truckloads of logs daily.

g. Proposed measures to reduce or control transportation impacts, if any:

Roads will be signed to inform travelers of harvest operations occurring in the vicinity. Roads will be maintained while timber harvest activity is occurring and after harvest has been completed. Some logging spurs may be closed after timber

harvest. Log hauling will not be allowed during spring breakup or during extremely wet conditions as determined by the contract administrator.

**15. Public Services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

None.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

**16. Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

**C. SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Christopher Hosch Date: 8/30/06
Christopher Hosch, NE Region Contract Forester

Reviewed by: Janet Rogers Date: 8/30/06
Janet Rogers, NE Region Forest Health Forester

Reviewed by: Andrew R Stenbeck Date: 08/24/06
Andrew Stenbeck, Arcadia District Manager

Reviewed by: Bob McKellar Date: 8/30/06
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